

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Vignina 22313-1450 www.uspto.gov

APPLICATION NO. FILING DATE		ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/904,516		07/16/2001	Nathalie Mougin	P 0281573 B00/2208 US	2271		
909	7590	07/02/2003					
		HROP, LLP	EXAMINER				
P.O. BOX 10500 MCLEAN, VA 22102				SHARAREH, S	SHARAREH, SHAHNAM J		
			•	ART UNIT	PAPER NUMBER		
				1617	. /		
				DATE MAILED: 07/02/2003	. 4		

Please find below and/or attached an Office communication concerning this application or proceeding.

				Applicati n I		Applicant(s)				
•										
•	Offic	Action Summary		09/904,516			GIN ET AL.			
	Ome	Action Guillinary		Examiner		Art Unit				
	The MAII	ING DATE of this communi	ication ann	Shahnam Sh		1617	dross			
Period f		into BATE of this comman	ошиол ирр			on coponacion ad	27000			
THE I - External after - If the - If NC - Failu - Any I	MAILING E nsions of time r SIX (6) MONTI period for reply period for reply re to reply withing reply received by	OSTATUTORY PERIOD FO DATE OF THIS COMMUNION may be available under the provisions HS from the mailing date of this comm by specified above is less than thirty (30 by is specified above, the maximum standard the set or extended period for reply the Office later than three months and adjustment. See 37 CFR 1.704(b).	CATION. of 37 CFR 1.136 unication. O) days, a reply tutory period wi will, by statute,	6(a). In no event, I within the statutory ill apply and will ex cause the applicati	nowever, may a reply be tir minimum of thirty (30) day bire SIX (6) MONTHS from on to become ABANDONE	nely filed  rs will be considered timely the mailing date of this co D (35 U.S.C. § 133).				
1)⊠	Respons	ive to communication(s) file	ed on <u>28 M</u>	<u>larch 2003</u> .						
2a)⊠	This action	on is <b>FINAL</b> .	2b)∐ This	s action is no	n-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims										
· _			application							
•	Claim(s) <u>1-33</u> is/are pending in the application.  4a) Of the above claim(s) <u>1-17</u> is/are withdrawn from consideration.									
	Claim(s) is/are allowed.									
·	Claim(s) <u>18-33</u> is/are rejected.									
· <u> </u>	Claim(s) is/are objected to.									
· <u> </u>			on and/or e	lection require	ement.					
Applicati	on Papers	•		·						
9) 🗌 🤈	The specifi	cation is objected to by the	Examiner.	•						
10) 🔲 🧻	The drawin	g(s) filed on is/are:	a) accept	ted or b)☐ obj	ected to by the Exa	miner.				
		may not request that any obje		• • •	•	` '				
11)[		sed drawing correction filed			•	oved by the Examine	∍r.			
If approved, corrected drawings are required in reply to this Office action.										
12) The oath or declaration is objected to by the Examiner.										
		.S.C. §§ 119 and 120								
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).										
a)[		] Some * c) ☐ None of:								
	1. Certified copies of the priority documents have been received.									
	2. Certified copies of the priority documents have been received in Application No									
* S	<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>									
- 14) <u></u> □ A	cknowledg	ment is made of a claim fo	or domestic	priority unde	r 35 U.S.C. § 119(e	e) (to a provisional	application).			
		anslation of the foreign lan gment is made of a claim fo								
Attachm n				. •	-					
2) 🔲 Notic	e of Draftspei	es Cited (PTO-892) son's Patent Drawing Review (P sure Statement(s) (PTO-1449) Pa		4) 5) 6)	Notice of Informal F	r (PTO-413) Paper No(s Patent Application (PTC				

Application/Control Number: 09/904,516

Art Unit: 1617

### **DETAILED ACTION**

Amendment filed on March 28, 2003 has been entered. Claims 1-33 are pending.

Any rejection that is not addressed in this Office Action is considered obviated.

### Claim Objections

Claims 18-33 are objected to because of the following informalities: it is not clear what is meant by the limitation "L»group; L, L' and L»" in claims 18-33. Appropriate correction is required.

## Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 18-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laine et al (US Pat. 4,617,341).

Applicant's arguments with respect to this rejection have been fully considered but are not found persuasive.

Applicant argues that PEG units of present invention are connected at both ends to a diisocyante unit. (see Response at page 11). Examiner replies that this argument is not directed to the scope of the pending claims. As the initial matter, the rejection of record is based on the obviousness rational. Accordingly, the rejection has been directed to a subgenus of compounds that encompass the elected compound of example 1. Thus, in view of the teachings of Laine, the elected compound has been declared obvious for the reasons of record. subsequently, Applicant's arguments that PEG unit is connected at both ends to a diisocyante unit is not persusive, because

Application/Control Number: 09/904,516

Art Unit: 1617

:39

neither the generic claim 18, nor any dependent claims thereof are directed to such limitations. In fact, the instant claim I does not require the existence of any PEG unit, because when m in formula I is 0, no hydrophilic group is required to exist between the diisocynate unit. Thus, such diisocynate unit is directly linked to the alkylene radical of the quaternary nitrogen (see instant claims 18, 25). Similar results are true when n or p and m have the value of zero and L and L' are identical.

Applicant also argues that diisocyante unit of the present invention is aliphatic. (see Response at page 11). Again, this augment is not directed to the scope of the pending claims, as there is not such requirement within the body of any of the pending claims. in fact, instant claim 26 states that R4 may comprise an unsaturated ring. Therefore, this argument is moot.

Applicant then argues that Terminal groups in the presently claimed invention are bound indirectly to a quaternary nitrogen via a diisocyante unit. Again, this argument is not directed to the scope of the pending claims. Instant claim 26 describes the scope of the pending claims. Accordingly, functional groups R1-R3 can be directly bound to quaternary nitrogen.

Applicant finally argues that instantly claimed invention has greater than 4 carbons as the terminal alkyl group. This argument is not directed to the scope of the pending claims. The instant R and R' functional groups do not exclude aliphatic radicals of 1-4 carbons.

The polymers of Laine are in deed dispersible in water (see col 5, lines 13-25).

Thus, the obviousness rejection over Laine is proper and is hereby maintained, because

Application/Control Number: 09/904,516

Art Unit: 1617

all elements of the instant claims are taught and Applicant's arguments as a whole are not commensurate with the scope of the pending claims.

### Election/Restrictions

Newly submitted claim 1-11, 13-17 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the newly added claim is directed to a distinct invention which is related water soluble amphiphilic cationic associative polyurethanes polymer. These sets of claims are not directed to the elected species as set forth in Paper No. 8. In fact they are polymeric moieties having divergent physical and chemical properties. Since the claimed polymer is not allowable, restriction is proper between said product and method of using. (MPEP, 806.05(I)).

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 1-17 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP 821.03.

### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

Page 5

Application/Control Number: 09/904,516

**Art Unit: 1617** 

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shahnam Sharareh whose telephone number is 703-306-5400. The examiner can normally be reached on 8:30 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan, PhD can be reached on 703-308-1877. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-4556 for regular communications and 703-308-4556 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1123.

RUSSELL TRAVERS PRIMARY EXAMINER GROUP 1200

ss June 28, 2003